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(54) Title: PYRAZOLO[3,4-b]PYRIDINE COMPOUNDS, AND THEIR USE AS PDE4 INHIBITORS

$$R^{3c} \xrightarrow{R^{3e}} R^{3d}$$

$$R^{3b} \xrightarrow{NH}$$
(nhr3)

(57) **Abstract:** The invention relates to a compound of formula (I) or a salt thereof: formula (I) wherein: R<sup>1</sup> is Et, n-Pr, i-Pr, C<sub>2</sub>fluoroalkyl, or -CH<sub>2</sub>CH<sub>2</sub>OH; R<sup>2</sup> is H, Me, Et, n-Pr, i-Pr, C<sub>1-2</sub>fluoroalkyl, cyclopropyl or (cyclopropyl)methyl-; and NHR<sup>3</sup> has the sub-formula (nhr3): formula (nhr3) wherein R<sup>3a</sup> is methyl or ethyl; R<sup>3b</sup> is H, methyl or ethyl; R<sup>3c</sup> is H, methyl or ethyl, and R<sup>3c</sup> is H or methyl, provided that: (a) R<sup>3b</sup> is methyl or ethyl; and/or (b) R<sup>3c</sup> and R<sup>3d</sup> are independently methyl or ethyl; and provided that: (c) when R<sup>3c</sup> is ethyl and/or when R<sup>3d</sup> is ethyl and/or when R<sup>3e</sup> is methyl, then: R<sup>3a</sup> is methyl and/or R<sup>3b</sup> is a hydrogen atom (H) or methyl. NHR<sup>3</sup> can for example be [(1S)-1,2-dimethylpropyl]amino or t-butylamino. The invention also relates to the use of these pyrazolo[3,4 b]pyridine compounds in therapy, as inhibitors of phosphodiesterase type IV (PDE4), and relates to their use in the treatment and/or prophylaxis of inflammatory and/or allergic diseases such as chronic obstructive pulmonary disease (COPD), asthma, rheumatoid arthritis or allergic rhinitis.

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